

IN THE CLAIMS

1-35 (Canceled).

36. (Currently Amended) A replication-competent adenovirus vector for selective cytolysis of a target cell, comprising a first and a second adenovirus gene essential for replication, wherein said first adenovirus gene is under transcriptional control of a human carcinoembryonic antigen transcription regulatory element (CEA-TRE) and said second adenovirus gene is under transcriptional control of a cell-specific, tissue-specific or cancer-specific heterologous transcriptional regulatory element (TRE), and wherein said CEA-TRE comprises consists essentially of a polynucleotide sequence within about -402 to about +69 nucleotides relative to the transcriptional start site of the CEA gene and a polynucleotide sequence including nucleotides from about -14.5 to about -3.8 kilobases or from about -6.1 to about -3.8 kilobases relative to the transcriptional start site of the CEA gene.

37-42 (Canceled).

43. (Currently Amended) The adenovirus vector of Claim 36, wherein said CEA enhancer comprises consists essentially of a polynucleotide sequence from about -6.1 to about -3.8 kilobases relative to the transcriptional start site of the CEA gene.

44. (Currently Amended) The adenovirus vector of Claim 36, wherein said CEA enhancer comprises consists essentially of a polynucleotide sequence from about -14.5 to about -3.8 kilobases relative to the transcriptional start site of the CEA gene.

45. (Currently Amended) The adenovirus vector of Claim 36, wherein said CEA promoter comprises consists essentially of the nucleotide sequence as shown in SEQ ID NO:1.

46. (Currently Amended) The adenovirus vector of Claim 36 wherein said CEA enhancer ~~comprises TRE consists essentially of~~ a polynucleotide sequence within the region from about -13.6 to about -10.6 kilobases relative to the transcriptional start site of the CEA gene.

47. (Currently Amended) The adenovirus vector of Claim 36 wherein said enhancer ~~comprises~~ ~~TRE consists essentially of~~ a polynucleotide sequence from about -14.5 to about -10.6 kilobases relative to the transcriptional start site of the CEA gene.

48. (Currently Amended) The adenovirus vector of Claim 36 wherein said CEA promoter ~~TRE~~ is a sequence having at least 85% sequence identity to ~~nucleotides -402 to +69 as depicted in SEQ ID NO:1~~, wherein said promoter component retains the ability to increase transcription of an operably linked polynucleotide.

49. (Currently Amended) The adenovirus vector of Claim 36 wherein said CEA promoter ~~TRE~~ is a sequence having at least 90% sequence identity to ~~nucleotides -402 to +69 as depicted in SEQ ID NO:1~~, wherein said promoter component retains the ability to increase transcription of an operably linked polynucleotide.

50. (Currently Amended) The adenovirus vector of Claim 36 wherein said CEA promoter ~~TRE~~ is a sequence having at least 95% sequence identity to ~~nucleotides -402 to +69 as depicted in SEQ ID NO:1~~, wherein said promoter component retains the ability to increase transcription of an operably linked polynucleotide.

51. (New) The adenovirus vector of Claim 36, further comprising a transgene encoding GM-CSF, operatively linked to a TRE other than a CEA-TRE.

52. (New) The adenovirus vector of Claim 36 further comprising a transgene encoding herpes simplex gene encoding thymidine kinase (HSV-tk), operatively linked to a TRE other than a CEA-TRE.